January 4th, 1923.

Meeting was called to order by the president. The secretary was called upon and proposed Mr. Mark H. Doll as ex-officio member of the club. Mr. Doll was voted in and Mr. Baird talked on the trans-atlantic tests just completed. Statement was made that 316 out of 318 of the qualified amateurs got across.

Mr. Baird then briefly reviewed several new books on radio and stated that these books could be obtained from the public

library.

Mr. Strassman talked on the duties of city manager and advised the club of his plans to handle the various activities necessary in this position. He also made an appeal to the individual members of the club to assist him in his work which would in turn assist all of the radio activities in Milwaukee and the surrounding country.

Mr. Howell talked on the swinging of incoming signals and

possible explanations of this and fading phenomena.

Mr. Topolinski reported on the progress of the interference

suit against an amateur.

Several relay and interference questions arose and were thrashed out with recommendations as to the best way to handle the various situations.

Mr. Szukalski brought up the subject of monthly relay reports and the appointment of official relay stations. Discussion followed and the proper method of procedure decided upon.

Mr. Howell of the technical committee agreed to go to one of the members stations and to report on the local interference which was stated to be very bad in that vicinity.

Club adjourned shortly after nine o'clock.

January 11th, 1923.

Meeting was called to order by the vice-president. The secretary read the minutes of the previous meeting and the city manager was called upon. Mr. Strassman again requested that no testing be done after seven in the evening. Considerable discussion was held on the subject of interference by unlicensed amateurs using spark sets. All were asked to check up on these offenders and report as fully as possible to the city manager or his assistants, the location, name and address of the illegal stations. The efforts of the whole club should be to have all of those interested in transmission join the club, attend its meetings and get set straight in the right direction on transmission and reception. If they do not know the code, induce them to attend the code class so that they may make the proper applications for licenses.

We do not want any one interested in radio to regard our club as a policeman and to fear its action, rather we do want them to know that we want them with us so that we may all work together for the betterment of our own radio activities and the relay work of the league.

Mr. Lathrop of Waukesha was the speeker of the evening and gave the club members a very fine blackboard talk on audio frequency amplification. The method of elimination of distortion was illustrated and a sample of one stage construction was exhibited. Mr. Lathrop has used as high as five stages of amplification properly constructed and protected by shields, with practically no distortion.

Mr. Howell gave further report on the trans-atlantics and stated that stations from the states of Arizona, Utah and California had been heard on the other side.

Mr. Howell reported on the receiving station claiming interference on broadcasting wavelengths. A Reinartz tuner was used and this was checked by a Grebe. It was found that the Reinartz tuned very broadly and that when substituting the Grebe, no interference was traceable to amateur 200 meter transmission.

The club members were asked for suggestions as to the program for the following meeting and it was decided to discuss the best method of eliminating the A. C. hum from C. W. transmission apparatus with suitable filters.

Club adjourned at nine fifteen.

January 18th, 1923.

Meeting was called to order by the president and the secretary proposed the following names as applicants for membership.

James A. Rose
Justin W. Blauert
Fred Ebel
Harold Utzerath
Charles Schaaf

Vote was taken and all of the above were admitted to club membership.

Mr. Baird talked on the San Francisco Radio Club and read a letter from one of our old club members.

Mr. Fawcett stated that the scheme of the Chicago politicians to obtain a fee for each receiving station in the city of Chicago, had fallen through, and had been shelved for an indefinite period.

Mr. Howell of the technical committee told about experiments in conjunction with Mr. Lathrop which had been performed at Waukesha. These were on antenna resistance and an interesting blackboard lecture followed.

Mr. Berg of the Radio Corporation, being a guest of the club for the evening, was called upon and addressed the members for a few minutes.

A general discussion on filters used in C. W. transmission followed.

Mr. Szukalski suggested a scheme to get a large number of non-members to attend the club for one meeting so as to get cooperation on rules and regulations from those not belonging to the club as well as from the club members. Discussion followed and the club adjourned shortly after nine o'clock.

January 25th, 1923.

Meeting called to order at eight ten. Technical committee made a report on antenna resistance.

Mr. E. G. Nickel -9 A T O - was appointed chairman of the

committee on Papers and Publications.

Symposium on filter systems was held and it was found that the efficiency of rectifyers has a lot to do with pureness of note.

9 A T X reports that condensers give nearly pure D. C.

Tuned impedence tried but did not have the right values. 9 C Z F and 9 A N A report that chemical rectifyers with 2 mfd. condensers across power seems to be 0. K. without chokes.

Discussion on wave traps was held.

9 A A P was scheduled to talk at the next meeting. Club adjourned shortly after nine o'clock.

February 1st, 1923.

Meeting was called to order by the vice president and Mr. Strassman, City Manager, talked on local interference which he stated was very bad. Members of the club were asked to report to him or his aides, addresses or locations of stations operating without licenses. The city manager can handle the cases of jamming the air where legal stations are operating but it is the outlaw station that is hard to locate and all members are urged to assist the city mamager in every way in eliminating this kind of transmission.

Mr. Fawcett gave a blackboard diagram of a one tube super hookup. Constants of the circuit were given.

Mr. Nickel of the papers and publications committee gave an

interesting talk and description of station 6 K A.

Mr. Szukalski, one of the successful trans-atlantic transmitters was called upon and talked about his station and the various ways which he has found effective in holding a group station together. He also gave a description of the equipmentwhich he uses and a diagram of his C. W. set.

Club adjourned at nine o'clock.

February 8th, 1923.

Meeting was called to order by the president and the treasurer reported a balance of \$34.08 on hand. Mr. Baird reviewed one of the late books on radio received by the Public Library.

It was suggested that members refer any interesting articles or papers to Mr. Nickel or lend him the publications so that he might read extracts from them to the club.

Mr. Howell gave a short talk on antenna resistance.

Mr. Strassman stated that there was still toomuch testing going on in the evening and that this be eliminated so that as little interference as possible be caused to the broadcasting listeners. He also asked that all official A.R.R.L. stations forward their reports to him by the 15th.

Mr. Crapo read a letter from Mr. Ben Ott of La Crosse in reference to the number of messages handled last month. The number was 1523 which was a large increase over last month.

Mr. Fawcett brought up the subject of radio legislation and the part taken by the president of the A. R. R. L. in the conference. It was voted that a letter of appreciation be forwarded to Mr. Maxim expressing the clubs approval and understanding of his efforts in behalf of the amateur.

Mr. Howell brought up the subject of one, two and three circuit tuners. A spirited discussion arose which lasted until closing time and the discussion was held over until the next meeting.

Club adjourned shortly after nine o'clock.

February 22nd, 1923.

Meeting was called to order by the president and the treasurer proposed the following names for club membership

Fred Luers Rudolph Pohl

The above were voted upon favorably and admitted to the club. Mr. Howell gave a talk on transmitting circuits. Mr. Baird announced a B. D. meeting after the regular meeting. He also stated that he had visited the South Side Radio Club and had attempted to get them to consolidate their club with with ours so that instead of being divided, as at present, we could unite our efforts to make Milwaukees Radio club truly representative of the entire city. It was also suggested that each one try to enlarge the code class which was growing smaller instead of larger.

The City Manager, Mr. Strassman, talked about reducing interference locally. Discussion of wave traps was started and the technical committee was asked to look into and report on the various kinds of wave traps and their application.

It was decided that three types of tuners for tube reception could be classed as follows

Single circuit where only the antenna-ground circuit was tuned,

Two circuit where grid circuit was also tuned,
Three circuit where antenne, grid and plate circuits are
tuned.

The subject of radio frequency was held over until the next meeting which on account of the intervening holiday, would be on the evening of March first. Members were asked to prepare for the discussion on radio frequency amplification.

Club adjourned shortly after nine o'clock.

March 1st, 1923.

Meeting was called to order by the president and Mr. Baird talked on the Frisco Radio Club and their method of admitting new members to the club.

Discussion of interference with broadcasting reception was held and it was decided that little could be done unless definite information be furnished as to call number, address or location of the offender.

There was little criticism of holders of licensed stations but cases of illegal transmission were numerous. Several of these had been located and warned of action by the inspector. This warning was enough, in most cases to stop the trouble.

The south side radio club and the West Allis club sent representatives to the meeting to discuss the advisibility of consolidating these clubs with our own cantral club. Mr. Baird had prepared the way for this action.

The south side member made quite a speech in which among some humorous obversations he stated the real attitude of ex the south side club to the matter of consolidation. He stated that to a man the members of the club refused to join the parent club, giving the following reasons-

The dues of our club being higher, but few of the south side

club members could meet this requirement.

Considerable time would be necessary to make the trip to and fro from homes to the Public Library and additional expense in the form of car fare would be incured.

in the form of car fare would be incured.

Members of the south side club could not afford to each belong to the A. R. R. L. this being a requisite of our own club.

Mr. Radwanski, their mouthpiece, also stated that aside from the above reasons, their members did not want to amalgamate with our club but would assist and co-operate with us in every other way in their power. As a proof that there was nothing personal in this attitude, Mr. Radwanski asked for an application blank so that he personally would be a member of the M. A. R. C.

Promise was also given to aid and assist the City Manager in his duties of regulating traffic and policing the air.

The West Allis Club representative stated that they did not care to consolidate on account of the distance necessary cover to attend our meetings. They would, however, co-operate with us to the fullest extent.

Mr. Nickels read extracts from articles on radio legislation and wired wireless.

Mr. Howell gave a short talk on wave traps and the City Manager asked for volunteers with loop receivers to assist him in locating stations operating without U. S. Licenses.

Mr. Crapo read an interesting letter on relay traffic which stated that 2307 messages were handled by this district during the last month.

It was announced by the secretary that at the last B. D. meeting Mr. Szukalski was elected Vice-Director. The question of poor attendance at the B. D. meetings was considered and it was decided that unless this was adjusted, it would be necessary to elect new members to take the place of the delinquent ones.

The regular meeting adjourned shortly after nine o'clock.

March 8th, 1923.

Meeting was called to order by the president and the secretary proposed the following names as applicants for membership:

Floyd Baxter

Felix F. Radwanski

Vote was taken and both were admitted to the club.

Interference from a station signing 9 X Y was reported. It appeared that this call was being used illegally and the spark transmitter was blanketing the air from 200 meters up. Could not locate the offender.

Mr. Topolinski reported the drafting of the incorporation papers for the new MILWAUKEE RADIO AMATEURS CLUB. This name to take the place of the one now used.

Mr. Lathrop took up the rest of the evening in relating his experiences at the convention of the A. R. R. L. for the state of Michigan which took place at Flint, Michigan.

Announcement was made of B. D. meeting after nine o'clock. Club adjourned.

Board of Direction meeting was called to order by Mr. Crapo and the Rochester Plan discussed. After consideration, it was decided not to do anything in this direction at present.

Subject of the proposed new general radio club was brought up and talked over. Questions as to proceedure of City Manager in handling air regulations were considered and disposed of.

Meeting adjourned.

March 15th, 1923.

Meeting was called to order by the president and the secretary

read the minutes of the previous meeting.

Mr. Howell told of his visit to the station of 9 C Z Y the owner of which was high man in last months traffic handling. A description of the transmitter and a blackboard diagram of the hook-up was given. Mr. Howell also gave a talk on the Colpitt hook-up with a blackboard diagram.

The main event of the evening was the talk and discussion on the use of radio frequency amplification. Mr. Strassman gave several hook-ups and explained their application. Most of hid data was taken from Q. S. T. and the discussion which followed brought out many good points which were of interest to the club. It was not possible to cover the field in one evening of this interesting subject so the president asked the members to cary the discussion over until the next meeting.

Club adjourned about nine fifteen.

March 22nd, 1923.

Meeting was called to order by the president and the secretary proposed the following names as applicants for membership in the club-

Charles Ainsworth Paul R. Hutchins

Vote was taken and both were admitted to the club.

Mr. Baird announced that a moving picture would be shown in the lecture hall on the evening of April 5th. This picture is owned by the general Electric Co. and is entitled "The Wizardry of Wireless." The picture is said to be excellent and all members are advised to be present and to bring their friends with them on that particular evening.

Mr. Strassman again issued a warning to unlicensed stations and asked all members to warn any-one that they might know of engaged in illegal transmission. Checking up of these offenders is going forward and names and locations are to be forwarded to the radio inspector.

Messrs Howell and Lathrop talked on master oscillators and driver systems and illustrated the construction and operation of these tube combinations.

A short talk on radio frequency followed and the president, Mr. Wareing stated that he had left off experimenting for the present on radio frequency amplification of the ordinary kind and was constructing multi-tube super-heterodine and would be able to give us the results of his work some time in the near future.

A board of directors meeting was announced and the proceedings of the meeting were as follows:

Mr. Baird resigned his position as chairman of the Meetings and Papers committee. This position was taken over by the president and the various activities of this office will be handled by him in the future. There was some discussion of the activities of the Membership Committee as it was found that old members dropped out about as fast as new ones came in.

No constructive criticism was offered but this matter is to be considered by the whole club and some method of changing this condition arrived at.

March 29th, 1923.

Meeting was called to order by the president. Secretary read the minutes of the previous meeting and Mr. Baird announced the arrival of the film entitled "The Wizardry of Wireless". This will be shown in the large hall of the Public Library on the evening of Thursday the fifth of April. All members are requested to bring their friends as the hall is large and their is plenty of room for all.

Mr. Cary of the Publications Committee read several articles giving various transmission records.

Mr. Howell told of a method by the use of which a pure wave could be transmitted, thus eliminating interference caused by broad tuning at the transmitting end.

Mr. Szukalski reported no results on reception below 200 meters. The President, Mr. Wareing, was able to log several considerably below this wave length. This was done on the special tuner described in Q. S. T. a short time ago.

Mr. Strassman described the filter system used at 9 A. H. O. gave the results obtained, and illustrated the hook-up on the black-board.

Mr. Berresford, in Milwaukee for the Easter holidays, described the transmitter which he now uses at college and the new one which he is now building.

Announcement of B. D. meeting was made for the next meeting. Meeting adjourned.

April 5th, 1923.

Instead of the regular meeting of the club in the trustees room, a special meeting was held in the large hall to which the public was especially invited.

A moving picture entitled "The Wizardry of Wireless" was given and a record attendance took place. People from all walks of life were present and their ages ranged from the youthful beginner to mature old age. All were held togather by their interest in the new art of Radio which is no respector of persons but draws its followers from every age and rank.

The picture itself was a modern moving diagraph illustrating the action and operation of both transmitting and receiving apparatus. The excellence of the illustrations which were purposely exaggerated in their moving parts, was felt by even the old timers to whom Radio is an every day affair. From words and expressions heard after the performance, there did not seem to be any that were not benefitted by seeing this picture.

The club visitors were asked to remain after the picture and hear the short talks which would be given by members of the club.

Mr. Howell of the Technical Committee addressed the group giving the aims and activities of the club and invited those interested to attend the regular weekly meetings.

Mr. Strassman, City Manager, then spoke and told of his position and duties and how he, with his assistants, endeavored to keep the air clear and orderly so as to minimize the interference which is more or less experienced by all. He also explained the various ways in which interference can take place and showed how in many instances the amateur was blamed for the trouble when other causes were responsible. Mr. Strassman told how the club is always ready to investigate trouble reports and explained that it is best to report alleged amateur interference to either himself, his aids or to be present at one of the regular club meetings where the matter could be discussed.

No formal meeting was held after the picture.

April 12th, 1923.

Meeting was called to order by the president. The secretary read the minutes of the two previous meetings and proposed the following as applicants for club membership-

Wm. G. Cram Walter E. Wetzel Fred Catel

Vote was taken by the members and all three were admitted as new members.

The speaker of the evening was Mr. Nunn. Blackboard hook-ups and diagrams were shown. The subject was radio frequency amplification and the talk was both interesting and instructive.

Mr. Nunn answered a number of questions relative to his text and gave suggestions to those working along the same lines.

Mr. Howell of the technical committee gave a good talk on tuned grounds used in transmission.

Mr. Cary of the publications committee read several extracts from Q. S. T. and other papers.

Board of Direction Meeting was announced following the regular meeting.

The entire time of the B. D. meeting was devoted to the incorporation papers of the club and these were signed and sealed thereby making the new name of the club as follows-

THE MILWAUKEE RADIO AMATEURS CLUB

MINUTES OF THE MILWAUKEE RADIO AMATEURS CLUB

April 19th, 1923.

Meeting was called to order by the president. Mr. Baird, the business manager told of his experience with several complaints in reference to amateur interference.

Mr. Baird introduced the speaker of the evening, Mr. Chas. S. Polacheck, known by all as an honorary member of our club.

Mr. Polacheck gave an interesting talk on his trip to the west coast and his impressions of both Los Angeles and San Francisco.

Mr. Howell told about the Reinartz receiver which he had just completed, describing its good and bad points.

Mr. Baird stated that he was no longer in charge of the entertainment committee which the president would care for in the future. However, he had arranged with the president for the next meeting the presence of one of the engineers of the Wisconsin Telephone Co. This gentleman will give us a talk on vacuum tube characteristics.

The meeting did not adjourn at the usual hour as it was stated that this was not necessary any longer. In conformity with this the club will adjourn each meeting on motion only hereafter.

April 26th, 1933.

Meeting was called to order by the president. Mr. H. P. S. Day, engineer with the telephone company, was introduced as the speaker of the evening. Mr. Day gave a nice blackboard lecture on vacuum tubes and their characteristics. After his talk, Mr. Day answered questions and gave considerable additional information of general value in reference to the use of tubes in Radio work.

It was announced that all amateur licenses issued after May 15th would bear the words prohibiting transmission in the evening between the hours of seven-thirty and ten o'clock. This is in the same direction as the request printed in O. S. T. last month and makes the action absolutely necessary.

Appointment papers from A. R. R. L. headquarters for official observer were turned over to Mr. Strassman so that this could be taken care of.

Reference to day-time trans-atlantics was made with recommendations to lo all possible to help in this work.

Article in the newspaper referring to elimination of static was turned over to the technical committeefor investigation.

Board of direction meeting was announced to follow the regular meeting.

Adjournment took place shortly before ten o'clock.

MINUTES OF THE MILWAUKEE RADIO AMATEURS CLUB

May 3rd, 1923.

Meeting was called to order by the president. Mr. Howell, chairman of the technical committee, talked on antennas giving blackboard sketches of the various types, their application and working efficiency.

It was stated that at the last B. D. meeting it was decided to place before the club members the advisability of acting upon the recommendation of the A. R. F. L. to entirely free the air of traffic between the hours of seven-thirty and tenthirty each evening.

Considerable discussion was held as to the proposed action and Mr. Strassman made a motion that this rule be incorporated into a by-law at the next B. D. meeting.

The motion was carried with all members in favor of this action.

Mr. Howell made a plea for more data to be used by the technical committee and asked the individual members of the club to come forward with their experimental data, a great amount of which never reaches the rest of the club.

Meeting adjourned.

MINUTES OF THE MILWAUKEE RADIO AMATEURS CLUB May 10th, 1923.

Secretary not present.

May 17th, 1923.

Meeting was called to order by the president. Mr. Howell of the technical committee talked on filters used in transmission. The three principal types were shown and characteristics of each method discussed.

Mr. Strassman, city manager, stated that there is still some interference during the quiet period but did not hear any from licensed stations. He asked all members to report infringments of the new rule to him or his assistants, giving the call of the offending station.

Mr. R. H. G. Matthews was introduced as the speaker of the evening. Matty needed little introduction to the members and he proceeded to give a very fine talk on the various component parts of a receiving set. Starting with the antenna, Mr. Matthews went thru the parts, piece by piece, giving the results of tests conducted in the laboratory and the practical application of the results so obtained. He also gave the constants of a simple receiving set whick was stated to be extremely selective and simple to operate.

Mr. Marko next spoke on five watt tube transmission and how to increase the plate voltage above the rate at which the tube is listed. Mr. Marko was obliged to break off in his talk on account of the lateness of the hour.

Meeting adjourned at about ten o'clock.

MINUTES OF THE MILWAUKEE RADIO AMATEURS CLUB

May 24th, 1923.

Secretary not present at meeting.

Board of Direction meeting held after the regular meeting. Mr. Crapo acted as secretary and reported the following: - Held in the Trustees room and called to order by president Wareing at 9:30 P. M.

Members present -- Simandl, Szukalski, Strassman, Crapo,

Howell.

Main topic was discussion of club stationery. Board authorized the purchase of 1000 letter heads and 1500 envelopes.

Mr. Fred Catel was appointed assistant treasurer to E. W.

Ruppenthal.

Meeting adjourned at 10:00 o'clock P. M.

MINUTES OF THE MILWAUKEE RADIO AMATEURS CLUB

May 31st, 1923.

Meeting was called to order by vice-president Howell.
Mr. Baird stated that suitable stationery was being printed

to conform to the clubs new name and legal position.

Mr. Strassman, City Manager, stated that considerable spark interference was being encountered during the quiet period. He asked for six or eight volunteer recorders to assist him in eliminating this trouble which harms all radio amateurs. Mr. Strassman advised members to ignore calls during the quiet period so as to help the general situation.

Mr. Howell gave a blackboard talk on the Zenith tuner as outlined by Matthews on his last visit to the club. He spoke very favorably of the tuner and gave it his approval as an excellent receiving set for both code and voice reception.

Mr. Myers told about his trip to Toledo and his impressions

of radio activities in and about that city.

Mr. Howell then opened the meeting to an informal talk-fest which lasted until the club adjourned.

June 7th, 1923.

Secretary not present.

June 14th, 1923.

Secretary not present.

June 21st, 1923.

Meeting was called to order by the president. Mr. Baird talked about the expedition on its way to the north pole and about the A. R. H. L. man in charge of the radio equipment on the ship. Instructions were given as to the correct way to handle any messages which might be picked up from them.

Mr. Cary read several extracts from radio publications

including an article on the four circuit tuner.

Mr. Howell spoke on wave meters and the new neutrodine circuit. Mr. Collenberg also had a few words to say on the neutrodine receiver.

Mr. Joseph L. Rockett was voted in as a new member of the club.

As this was the last regular meeting of the club until the Fall of the year, discussion was held as to the B. D. meetings to be held during the summer months.

It was decided that three B. D. meetings would be held at 601 Enterprise Bldg. at eight oldlock on the following evenings,--

July 19th August 16th September 6th

The first regular meeting of the club to be held at the usual place on the evening of September 20th.

Meeting adjourned.

MINUTES OF THE MILWAUKEE AMATEURS RADIO CLUB August 16th, 1923.

Board of Direction meeting was held at 8 P. M. with the following members present -- Messrs Crapo, Baird, Howell,

Szukalski, and Fawcett.

It was decided that another B. D. meeting be held on August30th and that the secretary send out formal notices to that effect. It was also decided that the regular club meeting be held at the Public Library at the usual time on the evening of September 20th.

Discussion was held in reference to attending the Chicago Convention which is to be held September 12th to 15th

inclusive.

An active membership campaign is to be organized to build up the club membership.

The treasurer was not present but it was reported that the funds on hand were very low.

The corporate meeting of the club is to be held on September

More definite arrangements are to be made at the next B. D. meeting on the 30th.

END